FINE
NA
200
.F47
1892

CORNELL
UNIVERSITY
LIBRARY

FINE ARTS LIBRARY

THURSTON

Comparative Architecture

DATE DUE

GAYLORD

PRINTED IN U.S.A.

Cornell University Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924102156050

CORNELL UNIVERSITY LIBRARY
3 1924 102 156 050

COMPARATIVE ARCHITECTURE

CORNELL UNIVERSITY LIBRARIES
ITHACA, N.Y.

COMPARATIVE ARCHITECTURE

BY

BARR FERREE

A PAPER READ BEFORE THE

AMERICAN INSTITUTE OF ARCHITECTS

AT ITS TWENTY-FIFTH ANNUAL CONVENTION

BOSTON, MASSACHUSETTS, OCTOBER 29TH, 1891

NEW YORK:

REPRINTED FROM THE JOURNAL OF THE INSTITUTE

1892

Fine
NA
200
.F47
1892

231 *Broadway, New York,*
November 1st, 1892.

Circumstances over which the author had no control has delayed the printing of this paper for more than a year after the time at which it was read. His thanks are due to the Directors of the Institute for permission to reproduce it in its present form.

COMPARATIVE ARCHITECTURE.

I.

Few methods of study have added more to human knowledge or stimulated to greater effort than the comparative. In the natural sciences, in anatomy, biology, zoölogy, bacteriology, physiology, geology and the multitude of kindred subjects which treat of the animal, vegetable and mineral kingdoms, it has opened up new fields of culture, broadened our knowledge and made us familiar with forms of life that would otherwise have escaped notice. Nor have the results been less remarkable in those sciences concerned with man himself. The scholarship of the nineteenth century boasts no more remarkable achievements than those in comparative philology, which have given us a new insight into the history of our race and the mutual relations of the human family. In anthropology, in mythology, in ethnography and similar sciences the world has been enriched with valuable knowledge that has been obtained chiefly by the application of the comparative method to the historical and descriptive sciences. We live in an age of comparative study.

The rich results obtained by the comparative method in natural and human sciences justify the hope, as well as suggest the thought, that not less valuable returns will be obtained by the extension of the system to other branches of knowledge, to other products of the human intellect, to other problems of history and life. It may, perhaps, be doubted if art or architecture can properly be called

sciences, but it is quite unnecessary to raise the question; anything that can be treated historically and descriptively, as art may in all its branches, can also be studied comparatively. The results obtained from a study of a product of the human mind, as art, in which the imagination, the personal equation, in a certain sense, enters so largely, may not be so valuable nor so definite as in a subject into which this personal and variable element does not enter. Architecture, however, is of all arts the least imaginative; it is concerned with practical questions, with the environment, with geological structure, with climate, with local conditions, with materials, with the special uses to which its products are to be put. The imagination of the architect is constantly hampered by limitations that do not affect the painter or the sculptor. It thus offers material for comparative treatment not possessed by other forms of art. But in suggesting this method I would especially remark that it is not proposed to formulate an architectual science, nor to derive a "law of architecture" whereby it will be possible to predicate certain architectural conditions and processes from certain data, and thus perhaps prove the existence of missing links that have disappeared from view. Any such attempt must be attended with failure. All that can be hoped from comparative architecture is the advantages to be gained from a fresh grouping of facts, and the new and greater interest such treatment gives.

II.

It is unnecessary to define the historical and descriptive methods, but in suggesting a third form of architectural study it should not be inferred that the older forms have had their day. There is still much work to be done in both of them, but the comparative method will help to a clearer understanding of our present knowledge and make future work more intelligible. One further preliminary point may be touched on, the meaning and scope of achitecture. This topic would require a separate paper to be fully and intelligently discussed, but every architectural study needs to have

its basis stated, and while I fear it may cause much misunderstanding because there is not space to treat this question properly, I would say that by architecture I include every edifice erected by human hands, ancient or modern, historic or prehistoric, ugly or beautiful, useful or useless. And on all of these I would draw for the materials of comparative architecture.

To get down to a definition I may say that comparative architecture takes the facts of historical and descriptive architecture, and describes the comparative progress made by all nations under every condition. It takes the substance of the art, its materials, the climate in which characteristic styles have developed, the national or governmental conditions under which they have flourished, the ethnographic relations of the people, the geological peculiarities of architectural districts, the distinctive social and mental qualities, notes the influence of the allied arts, of religion, of temperature, of use, of civilization, of constructive ability, of methods and the other causes which have operated in one way or another, to a greater or less extent, in the production of architecture in all times and in all ages. It matters not what be the definition of architecture finally adopted in the comparative view. It does not matter in comparative architecture whether climate, country, nationality and other conditions are considered part of the meaning of architecture or not. No architecture of any kind is possible without some of them, perhaps not without all of them, though sometimes some influences are of so little force as to be scarcely visible. It needs no straining of definitions to make these things legitimate subjects of study, and they are therefore here conveniently grouped under what I have called comparative architecture.

In writing a history of architecture on the old historical style, an author would arrange his subject in countries—Egypt, Assyria, Asia Minor, Greece, Rome, etc.—and under each of these, perhaps, note the effect of the various causes that have just been enumerated. I say perhaps, because he may be descriptive altogether. But admitting that he was

not, the result would be a series of chapters in which the reader would have to begin at the beginning each time, and note the influence of religion, materials, construction; for example, first in Egypt, then in Assyria, and so on through the list, without having the least idea, speaking generally, of the actual manner in which materials, construction and religion affected architecture as a whole.

In the comparative method the chapters would be headed not with names of countries, but with names of influences, as materials, construction, climate, geology, etc., and the effects of each of these noted in their varying degree in each country where architecture has flourished. Of course it will be impossible to obtain a general view of the different styles or forms of architecture from such a study, but the comparative is intended to supplement present methods, not to take their place. And this forms, I take it, not only a new science, a new method of art study, but gives greater interest to historical art in showing how in some styles one element will determine a form that is totally wanting in another, or which has assumed a new form from other causes. In other words, architecture is shown to be a natural art evolved under natural conditions, not a mere succession of historical facts with disquatations on dates and problematic conjectures, nor even a combination of descriptions, in which the student is informed of the number of windows, doors, columns and square inches of ornament in an almost endless number of examples. Comparative architecture does not concern itself with the history and descriptions of styles, but with the reason for their existence.

The importance of this distinction is not to be overestimated. We live in an age of inquiry. It is not sufficient to state facts, to give results, to quote conclusions. It is necessary to give a reason why, and a reason that all can understand. In the nineteenth century authority must have a basis that can be seen and appreciated by all men. We live in a time when evidence is sifted to an extent hitherto unknown. In describing historical events nothing that has the most insignificant connection is unnoticed, and it is to the credit of

modern research that this minute microscopic investigation has returned some of the richest results in modern culture, thrown new and unexpected lights upon distantly connected events, given a new and living interest to subjects almost dead from want of vitality. In the natural sciences the same methods have brought about similar results. It cannot be doubted that similar researches into the history of architecture will have any other than beneficial effects. Under the comparative treatment architecture acquires a meaning and purpose that it could never have had while viewed solely in the historical and descriptive manner. Styles, methods, results, variations are explained and their relationship traced. Reasons for the prevalency of certain forms under certain conditions are given, and the art is no longer the product of the imagination, the creature of the fancy, but the natural outcome of conditions of very varied nature, originating under varied circumstances.

It would require more space than can here be taken were I to take some points in architectural history and illustrate by one or two examples what I mean by the comparative treatment. I shall not, therefore, undertake this task, but the more closely the reasons of architecture are examined the less spontaneous it appears, the closer it approaches the domain of law. Ornament remains outside any such influence, and the personal element, as has already been noted, thoroughly prevents architecture from being regarded as the product of an evolution, as is a plant or an animal; but it is not the result of personal whim, fancy, pleasure or imagination. The Assyrians did not build their immense walls, the Romans their ponderous arches and vaults, from mere fancy or a deliberate desire to produce big buildings. The peculiarities of these architectures came very largely from the nature of the climate and the country, and the personal and political feelings of the people. In other times, in other climates, among other peoples, other phenomena have brought about other changes. We cannot refer the production of the historical styles to any one set of phenomena, it is not possible to get further than general groups; but

notwithstanding their broad uncertainty these show architecture to be a living, progressive art, reflecting the deeds and nature of men with a thoroughness and fidelity that has been surpassed by few records.

III.

This brings me to a new division of my subject, the influence comparative architecture may have on the furtherance of architectural knowledge and its diffusion among the people. There are few things so dreary as architectural study to all but enthusiasts. Professor Freeman, in his preface to the fifth volume of his *Norman Conquest*, remarks very truly: "I do not wonder that many are tempted to look with contempt on architectural research, when it is carried on, as it often is, as a mere matter of dull detail, without any animating principle. Many of our architectural inquirers have carried on their researches in ignorance of the first laws of historical criticism and of the most obvious facts in the history of the world. But deal worthily with the history of architecture, and it is worthy to take its place alongside the history of law and of language."

The dull record of historical sequences, the detailed examination of styles and their characteristics, the warfares over nomenclatures, the strict chronological chronicling of buildings of all times and ages will never give the animation to architectural study the distinguished historian so eloquently pleads for, and in the absence of a better method the comparative is suggested as a relief to present tendencies in which each new book is often a regrind of its predecessors, and the latest utterances perhaps only a conning over of what has been said before.

There is no greater evil in architectural study than isolation. Architectural students are so fascinated with the beauties of their specialty, are so consumed with the desire to make all men familiar with the wonders they describe, that they overlook the relations existing between architecture and other products of the human mind. No just estimate of all the works of men can be possible which does not

take into account his buildings, even though their æsthetic value is neglected. Yet architectural historians do not hesitate to prepare essays on their subjects in which the great historical events that rendered possible the very structures they are describing are ignored or scarcely referred to. A building is a thought, an idea, an expression of the human mind, an intellect product, albeit made with hands. It is a monument of human ideas, a record of human industry, a product of human skill, an epitome of human knowledge. It is not a spontaneous creation evolved in a moment, but represents a co-ordination of events, each of which is essential to its proper understanding. A building, a group of buildings, or those of one style or district require a full knowledge of the events of the time in which they were built for their complete understanding, just as the biography of a man must include the events of his lifetime, not alone those in which he took an active part, but those which affected the events that affected him. As complete a record is needed for understanding the life of a building as for understanding the life of a man.

Viewed alone, the most imposing of architectural monuments loses part of its meaning and beauty. The Parthenon needed the statue of the goddess to make it complete; nor is this all. It is the finest product of Greek art because it was built at the height of Greek national life. It was not a temple simply, but a national monument to the national genius. It is no detraction from its architecture that it represents an idea, expresses the voice of a people, is at once the symbol of a free race and the power of a proud city. These qualities add to its interest, they bring the wonderful building, with all its amazing perfections, its delicate proportions, its consummate art, to the notice of people to whom it otherwise would be strange and unknown. Its art influence and importance increases with its historical value.

As of the Parthenon, so of other structures. The cathedral of Paris is not interesting alone for the mighty events which have transpired in and around its walls, but because, like the great temple of Athens, it expresses an idea, and is

the visual evidence of the gigantic effort made by men to express the thoughts and ideas which crowded their minds at the breaking away of the dark ages. A great mediæval church like Notre Dame needs the history of its time to make its meaning clear. The two glorious towers of Chartres show not alone a change in architectural tastes and methods, but a change in ideas and conceptions. The solemn grandeur of the southern tower, with its tall, plain, stately, simple spire, requires no written record to testify to its early date. Its stern majesty belongs to a time when men's thoughts were impressed with the perils of a future life, and when the religious instinct was developed to a high degree. The more richly decorated northern tower —more elaborate, scarcely more beautiful, yet not less so —testifies to less rigid ideas which had come into vogue at the time it was built. Religion to men was less solemn, and the freedom of the religious views was reflected in the architecture.

It is not sufficient to describe buildings apart from their environment, nor to condense the historical events with which they are most intimately associated into the compass of an introductory chapter. The two things are not separable. It may seem formidable to state that the history of architecture is the history of humanity, and that one cannot be understood without the other. The mere compilation of architectural history in this sense becomes a vast undertaking; but is much distorted knowledge more valuable than a little well understood and thoroughly comprehended? The historical school of architecture does not mean the history of intellectuality or of humanity, but a chronological catalogue of buildings. The descriptive method is defective in scientific arrangement, and creates an actual repulsion toward the art, and has done not a little in making architecture seem the heaviest and dullest of studies, instead of one of the most beautiful and fascinating. Architecture, both as an art and as the science of construction, suffers from a lack of popular interest. Architecture is not popular, as china painting, decorative upholstery, and many other so-called

arts, while both painting and sculpture surpass it in the popular mind. I think it scarcely an exaggeration to attribute this condition, very largely at least, to the dull, prosy way in which writers on architecture have presented their subject, the dogmatic manner in which they have held forth on questions of taste, the persistence with which they have dragged their own individual prejudices and ideas into prominence, their failure to grasp the true meaning and function of architecture.

I am not without hope that the comparative method may introduce a change for the better. Clearly, if architecture is to become popular, some new method must be adopted for its general treatment, or it will die from sterility of interest. I do not assume to do more than point a way that might be, not one that is. The method and its uses are suggestions for consideration and criticism, not as something complete and perfect.

A brief glance at the status of some forms of knowledge will show how very different is the place held by architecture in the popular mind from what it should be. Subjects which a few years ago were dull, heavy and lifeless are now among the most popular of diversions. In psychology, in mental and moral science, in political economy and similar topics there has not only been an increase in knowledge, but an immense increase in popular interest. Quite as remarkable, and even more out of touch with current life, is the interest that has been aroused in the study of dead languages. Assyrian, Persian, Egyptian, and the tongues of ancient India are studied with avidity, not in the universities alone, but by general readers. It is one of the most amazing intellectual puzzles that architecture should be so thoroughly overlooked in this latest revival of learning. Architecture is not less valuable than the study of Sanscrit, nor is it something which does not affect all men. Obviously, if the error is not in the subject it must be in the method.

The history of architecture, and, it might almost be said, the whole history of art, is the only form of knowledge which is not now treated in a scientific manner. Art history deals

almost exclusively with superficialities. The historian too often feels that when he has described a work of art he has done all that is required. If the origin of certain forms or motives are pointed out, the historical sequence is supposed to be established, and no more is expected. This system is not valueless, or even uninteresting, but it ceases to have merit when it becomes the solitary mode of architectural study.

The comparative study of monuments already forms the basis of the work of the most advanced archæologists, but their method is more analytical than that which, for want of a better name, is here styled comparative. To a certain extent, it may be said the whole history of architecture rests on this method; but does it go far enough? If important facts can be ascertained by the analytical study of co-ordinate groups of buildings, should it be less valuable to apply a similar method to buildings which are not so related? No matter how buildings may differ in point of time, in use, in construction and in environment, they are all products of the human mind—they are all outcomes of the genius of humanity; they all express the development of human society, thoughts, ideas. They come from the action of men's minds and deeds, and if his political and social doings are fit subjects for comparative study, his own indestructible monuments are not less so. The general historian does not fail to make history from the scantiest memorials of fugitive people when their buildings afford the only clue to their existence; shall he drop architecture in compiling the records of historic times when other sources of information are at hand? Surely, if architecture alone can be made the basis for the reconstruction of civilizations of which it is the solitary survival, it might be fruitful of vastly more valuable results when studied in connection with other works of men, when instead of being the sole remnant, it is one of several.

It is on this basis what I have called comparative architecture rests. It is not a science of building; it does not seek to establish laws other than the broadest and most diffuse; but it does aim at exhibiting architecture as a product

of the human intellect as much entitled to rank among the intellectual possessions of humanity as language or literature, science or music. Certainly, if treated intelligently, such a method of study would add a new zest to this important topic, would render it interesting where, to the popular mind, it is now dull. The materials for comparative architecture are as abundant to-day as at any time in the past. Architecture is now limited by stricter requirements than at any earlier time. We cannot now study perspective, environment, the effects of light and shade as did the Greeks. Our architecture is based on other conditions and is intended to answer other requirements. Comparative architecture has to do with architecture as a product of the human mind, as the result of intellectual processes and reasonings, and each day these things enter more and more into the making of modern architecture.